



Testimony

Before the Committee on Environment and Public
Works and the Committee on Foreign Relations,
United States Senate

For Release on Delivery
Expected on Wednesday,
July 24, 2002, at 10:30 a.m.

INTERNATIONAL ENVIRONMENT:

U.S. Actions to Fulfill Commitments Under Five Key Agreements

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Report Documentation Page

Report Date 00JUL2002	Report Type N/A	Dates Covered (from... to) -
Title and Subtitle INTERNATIONAL ENVIRONMENT: U.S. Actions to Fulfill Commitments Under Five Key Agreements		Contract Number
		Grant Number
		Program Element Number
Author(s)		Project Number
		Task Number
		Work Unit Number
Performing Organization Name(s) and Address(es) U.S. General Accounting Office 441 G Street NW, Room LM Washington, D.C. 20548		Performing Organization Report Number GAO-02-960t
Sponsoring/Monitoring Agency Name(s) and Address(es)		Sponsor/Monitor's Acronym(s)
		Sponsor/Monitor's Report Number(s)
Distribution/Availability Statement Approved for public release, distribution unlimited		
Supplementary Notes		
Abstract see report		
Subject Terms		
Report Classification unclassified		Classification of this page unclassified
Classification of Abstract unclassified		Limitation of Abstract SAR
Number of Pages 15		

Messrs. Chairmen and Members of the Committees:

I am pleased to have the opportunity to comment on the results of work we performed for you on the United States' actions to fulfill its commitments under five international environmental agreements. These agreements, which were identified by your offices, relate to climate change (Framework Convention), desertification (Desertification Convention), the earth's ozone layer (Montreal Protocol), endangered species (CITES), and North American environmental cooperation (North American Agreement).

Because the causes and consequences of climate change and other environmental problems do not respect national boundaries, the United States and other nations have entered into numerous international environmental agreements to address such problems. These agreements typically provide that the parties will undertake various actions. Some provisions are specific and measurable (such as having the parties establish domestic programs to, for example, reduce greenhouse gas emissions, or having them report periodically on their progress), while others are general and difficult to measure (such as having the parties coordinate with each other).

Today, as requested, I will discuss three issues concerning international environmental agreements: (1) the extent of U.S. actions to fulfill specific commitments under the five agreements, (2) the processes and methods federal agencies use to track these actions, and (3) the results of independent evaluations of these actions.

In summary, our work shows the following:

- The United States is generally taking action to meet its specific commitments under the five agreements. For example, it established domestic programs, as required by three of the agreements. However, the United States fell short of meeting a commitment or pledge in two areas. First, in the area of providing financial assistance to other nations, the United States provided over \$1.4 billion in such assistance, but it provided less than it pledged for the Framework Convention (25

percent) and the Montreal Protocol (6 percent). Second, in the area of reporting, while the United States submitted nearly all of the 21 reports that it agreed to submit from 1997 through mid-2002, about half of these reports were submitted from 2 to 8 months late, and 2 were never submitted. Even though many U.S. reports were late, we determined that other parties' reports were also often late and that, for the most part, the U.S.'s tardiness had no significant effect.

- Agencies generally use informal means, such as meetings and informal communications, to track their actions to fulfill commitments under the five agreements. According to officials at the Department of State and at other responsible agencies, such informal means are sufficient and there is no need to establish formal tracking systems. We found no instance where the United States lost track of a commitment because it lacked a formal system.
- We found few studies that evaluated the effectiveness of U.S. actions. These few studies generally concluded that the actions examined had positive effects. For example, four studies of Environmental Protection Agency (EPA) activities pursuant to the Framework Convention concluded that they helped to reduce greenhouse gas emissions.

Background

Just as nations have established international agreements to deal with trade, weapons, and other issues, the United States and other nations have joined together to respond to transboundary environmental problems. Like other international agreements, environmental agreements are legal instruments that are negotiated, signed, and adopted by two or more countries. Developing such agreements involves achieving voluntary commitments among nations with various levels of industrial development, technical capabilities, resources, and concerns about particular environmental problems. Worldwide, hundreds of international legal instruments are aimed at environmental protection. According to a Department of State official, the department's Bureau of

Oceans and International Environmental and Scientific Affairs, which is primarily responsible for environmental and related matters, is involved in more than 100 bilateral and multilateral agreements in which the United States is a party or has an interest.

International agreements are intended to accomplish broad goals—such as controlling the trade in certain endangered or at-risk species and eliminating the production of certain ozone-depleting chemicals—but they do not always provide that the parties must achieve specific objectives within certain time frames. Furthermore, agreements do not always include mechanisms for monitoring whether the parties are fulfilling their commitments or for enforcing compliance.¹ To some extent, this arrangement reflects the belief that strict compliance and enforcement mechanisms would discourage nations from participating in a treaty. Therefore, the extent of a nation's compliance with international agreements generally depends on peer or public pressure.

The five agreements we reviewed are summarized below, in chronological order:

- The Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), which is intended to control the international trade in specified types of plants and animals (ratified by the United States in 1974);
- The Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol), which is intended to reduce the production and import of certain chemicals that deplete the earth's stratospheric ozone layer (ratified in 1988);
- The United Nations Framework Convention on Climate Change (Framework Convention), the objective of which is to stabilize concentrations of carbon dioxide and certain other greenhouse gases in the atmosphere at a level that would prevent dangerous human interference with the climate system (ratified in 1992);

¹ U.S. General Accounting Office, *International Environment: Literature on the Effectiveness of International Environmental Agreements*, GAO/RCED-99-148 (Washington, D.C.: May 1999).

- The North American Agreement on Environmental Cooperation (North American Agreement), which is intended to establish a framework for better protecting the continent's environment through cooperation and enforcement of national laws (entered into force in 1994); and
- The United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (Desertification Convention), which is intended to mitigate desertification and drought through improved land use practices, increased local participation in land use planning, and mobilization and coordination of funding assistance (ratified in 2000).

Like many other multilateral treaties, each of these five agreements created an institution to administer the agreement. These institutions are often called secretariats. Under CITES and the North American Agreement, these institutions are independent entities; under the other three agreements, the institutions are United Nations entities. These institutions are responsible for such tasks as compiling reports based on submissions from the parties, administering requests for technical assistance, and arranging the logistics for meetings of the parties.

Within the U.S. government, the Department of State is the lead agency for participating in the Framework Convention and Montreal Protocol. In the former case, the Department of Energy and EPA are the key implementing agencies domestically; in the latter case, it is EPA. The Department of the Interior is the key implementing agency domestically under CITES, and EPA is the key implementing agency for the North American Agreement. Although no agency has been assigned the lead responsibility for the Desertification Convention, the Agency for International Development provides the majority of the funding and other assistance to nations in support of the Convention; the Department of State also plays a significant role.

We discussed the facts included in this statement with the Director, Office of Global Change, and other Department of State officials, as well as officials from the Agency for

International Development, the Departments of the Interior and Treasury, and the Environmental Protection Agency. They generally agreed with the information presented and they provided clarifications, which we included where appropriate. We performed our work between November 2001 and July 2002 in accordance with generally accepted government auditing standards.

The United States Is Taking Many Actions to Fulfill Its Commitments, but Has Not Provided All the Funds It Pledged

The United States is, in general, taking actions to fulfill the specific provisions of the five selected agreements. We identified three types of provisions—establishing domestic programs, providing financial assistance to other nations, and reporting—that were found in two or more agreements (cross-cutting provisions), as well as agreement-specific provisions.

Establishing Domestic Programs

Three of the five agreements required the United States to establish new domestic programs to help fulfill its commitments —CITES, the Framework Convention, and the Montreal Protocol. The Desertification Convention and the North American Agreement required no new programs. Under CITES, for example, the Department of the Interior's Fish and Wildlife Service created a permit program to review the import, export, and re-export of parts and products of species listed as threatened with extinction. It issues about 4,500 such permits annually. Additionally, in conjunction with the Department of Agriculture's Animal and Plant Health Inspection Service and Treasury's Customs Service, the Fish and Wildlife Service monitors U.S. ports for illegal shipments of listed species' parts and products.

Under the Framework Convention, the United States has developed a wide array of domestic programs directly related to reducing greenhouse gas emissions. According to a July 2002 report by the Office of Management and Budget, the United States is

spending an estimated \$1.2 billion for such programs in fiscal year 2002.² This amount primarily funds Department of Energy and EPA efforts to research, develop, and deploy renewable energy technologies and energy-efficient products that help reduce the use of fossil fuels, as well as U.S. greenhouse gas emissions.

Under the Montreal Protocol, EPA promulgated regulations—initially in 1988 and later revised—for the 16 companies that produced or imported certain ozone-depleting substances. It established a schedule for them to phase out their production and net import of these substances, granting them an initial allowance to produce or import such substances and reducing the allowance gradually. In addition, EPA established programs to ensure that certain substances used in refrigerators and halon fire extinguishers were properly recycled and to develop safe and effective alternatives to ozone-depleting substances. As of March 2002, through the efforts of EPA and other federal agencies, 114 individuals had been convicted of illegal schemes to import ozone-depleting substances and \$67 million in fines and restitution had been imposed.

Providing Financial Assistance to Other Nations

The United States pledged to provide financial assistance to other nations under three of the five agreements. In two cases—the Framework Convention and the Montreal Protocol—the United States pledged to provide specific amounts of funds, and in both cases it provided less than it pledged. In the third case—the Desertification Convention—it did not pledge to provide a specific amount but did provide funds. In total, the United States provided more than \$1.4 billion under these three agreements.

Under the Framework Convention, the United States committed to provide an unspecified amount of funds. Separately, the United States later pledged to provide specific amounts to the Global Environment Facility, which is the financial mechanism

² U.S. Office of Management and Budget, *Federal Climate Change Expenditures: Report to Congress* (Washington, D.C.: July 9, 2002).

for the Framework Convention.³ The facility was established to help developing countries address climate change and other environmental problems. The United States pledged to provide \$860 million to the facility for fiscal years 1995 through 2002. However, through 2002, the Congress had appropriated \$649 million, or \$211 million (25 percent) less than the amount pledged.⁴ This shortfall resulted because, in some years, the Congress did not appropriate enough money to meet the pledge.

In addition to providing funds to developing countries through the facility, the United States supports developing and other countries' efforts to address climate change through the Agency for International Development. In fiscal year 2002, the agency is providing an estimated \$167 million to promote development that minimizes the growth in greenhouse gas emissions and reduces vulnerability to climate change.

Under the Montreal Protocol, the United States pledged to provide \$363.6 million between 1991 and 2001 for technical assistance and investment projects aimed at phasing out ozone-depleting chemicals in developing nations. However, it provided \$21.7 million (6 percent) less than its pledge during that period. According to EPA officials, the shortfall occurred for several reasons. The United States withheld more than half the shortfall amount (\$11.5 million) because of a prohibition on U.S. foreign assistance to Iraq, North Korea, and certain other nations.⁵ In addition, in some years the Congress appropriated less than the amount requested or imposed an across-the-board rescission to EPA's appropriation accounts.

Finally, under the Desertification Convention, the United States committed to provide an unspecified level of financial assistance to developing countries. When the convention

³ The facility was established on a pilot basis in 1991 and was restructured in 1994. It is funded by the United States and other countries, and its projects are implemented and overseen by the United Nations Development Program, United Nations Environmental Program, and World Bank.

⁴ This includes \$30 million appropriated in fiscal year 1994 that was applied to fiscal year 1995.

⁵ Federal law prohibits the use of U.S. foreign assistance to international organizations for programs in Burma, Cuba, Iran, Iraq, Libya, North Korea, and Syria, as well as to the Palestine Liberation Organization. 22 U.S.C. §2227(a)(2000). The United States withheld the share of its funds that would have gone to those entities.

was ratified in 2000, the United States was already providing financial assistance to countries experiencing desertification and drought.⁶ In fiscal year 2001, the first year of U.S. participation, the Agency for International Development provided \$93.8 million in assistance to other nations, including \$53.8 million to African countries, the Convention's primary focus. These amounts include bilateral and multilateral assistance designed to mitigate desertification and drought by improving the capacity of communities and local institutions to use new technologies and tools to better manage agricultural lands and natural resource areas.

Reporting

Although we found that the United States did not promptly submit nearly half the reports it had agreed to submit, many other parties were also late in submitting their reports. Moreover, we generally found that this tardiness had no significant effect on the agreements' secretariats or on other parties.

From the beginning of 1997 to the present, the United States agreed to submit 21 reports on implementation and related issues for the 5 agreements: CITES, 7 (5 annual and 2 biennial); the Desertification Convention, 1; the Framework Convention, 2; the Montreal Protocol, 5; and the North American Agreement, 6. Of these 21 reports, 8 were submitted between 2 and 8 months late, 1 is expected to be submitted soon and will be at least 3 months late, and 2 were never submitted.

The United States has been late in submitting at least one report related to four of the five agreements, as shown in table 1.

⁶ Furthermore, the President's letter transmitting the agreement to the Senate stated that the United States' obligations under the convention would be met under existing law and ongoing assistance programs.

Table 1. Number of Reports for Each Agreement, by Timeliness

Agreement	Submitted on time or granted an extension	Submitted late or overdue	Never submitted	Total
CITES	5		2	7
Desertification Convention		1		1
Framework Convention		2		2
Montreal Protocol	4	1		5
North American Agreement	1	5		6
Total	10	9	2	21

For example, under the Framework Convention, both reports were submitted late—the first by 3 months and the second by 6 months. Similarly, under the North American Agreement, four of the six reports were from 3 to 8 months late and one is overdue. Although the agreement itself does not require the United States to provide such reports, the parties decided to submit country reports in order to provide the secretariat with useful information.

Finally, the United States has not submitted two biennial reports on its implementation of CITES. According to a CITES secretariat official, most other parties also have not submitted them either. According to Fish and Wildlife Service officials, the United States has submitted annual statistical reports and other periodic reports to the secretariat on certain activities under CITES, which provide much of the information that would have been included in the biennial reports.

According to agency officials, in most cases, the United States’ tardiness had no significant effect on the agreements’ secretariats or other parties. However, the Secretary of the North American Agreement’s governing council said that the late submission of reports by the United States and other parties delayed the publication of the secretariat’s reports. According to the secretariat’s director of programs, these reports were less useful because the information was occasionally old.

Generally, the reports contained the information required under the respective agreements. For example, the Framework Convention reports are to include, among other things, detailed information on its policies and measures to mitigate climate change and its projected human-caused emissions. We found that both reports included

this information. The Convention also states that each party shall report on these two matters “with the aim of returning individually or jointly to their 1990 levels these anthropogenic [human-caused] emissions of carbon dioxide and other greenhouse gases.” The 1997 report addressed this issue by stating, “the measures listed in this report are not expected to reduce U.S. emissions below 1990 levels by the year 2000.” The 2002 report did not address this issue.⁷ According to data from the Energy Information Administration, U.S. emissions in 2000 were about 14 percent above the 1990 level.

In addition to these cross-cutting provisions, some of the agreements include unique commitments. We found that the United States is generally acting to fulfill such commitments. For example:

- Under the Montreal Protocol, the United States committed to achieving specific goals and timetables. The Protocol established a series of deadlines—from 1989 through 2030—for phasing out the production and import of dozens of chemicals that deplete the ozone layer. According to EPA data, the United States virtually eliminated the production and import of nearly all of these chemicals by the end of 1995.⁸ Under the Framework Convention, the United States did not commit to achieving a specific goal but did commit to reporting “with the aim” of reducing greenhouse gas emissions to the 1990 level. The other three agreements do not specify measurable goals.
- Under the Desertification Convention, parties are required to submit nominations to the secretariat for inclusion on a roster of independent experts in disciplines relevant to combating desertification and mitigating the effects of drought. Maintained by the secretariat, the roster is used as a central source of experts for technical assistance and other purposes. The United States established a Web site to receive applications

⁷ According to a Department of State official, the 2002 report did not address this issue because the “aim” set out in the convention refers only to the year 2000 and does not address emissions levels in later years.

⁸ The use of two other chemicals is to be eliminated in future years—by 2005, in the one case, and 2030, in the other case.

for membership on the roster. Applications are received by the Department of State, subjected to an interagency review process, and then transmitted to the secretariat.

- Under the Framework Convention, the United States committed to collect data on emissions of certain greenhouse gases. EPA regularly collects and publishes these data.

Agencies Generally Use Informal Means to Track Actions

Although the United States has made many commitments under these five agreements and taken numerous actions to fulfill these commitments, we did not identify any policy that would require government officials to formally track all such commitments and actions. Officials at the Department of State and other agencies told us that they generally use informal means to track U.S. actions to fulfill its many commitments. Officials said their interagency coordination begins while an agreement is being negotiated and continues after ratification because the agencies frequently interact while preparing for periodic meetings of the parties. Actions taken under all five agreements are tracked mainly through periodic meetings of officials from the various implementing agencies and other communications among these officials. The officials noted that they may also consider the views of interest groups and other parties to these agreements.

Officials expressed a preference for informally tracking U.S. actions for three reasons. First, the current system is effective in helping to ensure that the United States acts to meet its commitments. They added that they were unaware of any instance in which the United States had failed to meet a commitment because it lacked a formal tracking system, and we did not find any such instance. Second, developing and maintaining a formal system—such as (1) compiling a comprehensive database that captures information on all commitments and actions to fulfill those commitments or (2) requiring periodic progress reports on these matters—would involve substantial staff and other costs; these costs would likely exceed the potential benefits of having such a system.

Finally, most provisions in these international agreements are fairly broad and—even where the provisions are specific—there are generally few penalties for a nation’s failure to fulfill a commitment. Although two of the five agreements include mechanisms to enforce compliance, these mechanisms are rarely used. Under CITES, parties can disallow imports of CITES-listed species parts and products from countries that are not properly implementing CITES, thus restricting or preventing trade in such items. Agency officials told us that these sanctions have never been applied against the United States. Under the North American Agreement, monetary penalties may be levied if a party is found to have a persistent pattern of failing to effectively enforce its environmental laws; however, according to the secretariat’s director of programs, these sanctions have never been applied.

In addition to these informal tracking means, under the North American Agreement, the United States (like the other parties) annually compiles a detailed list of actions related to the agreement’s provisions. According to an EPA official, the detailed reporting format (which lists actions provision by provision) was established in the early years of the agreement to make the parties’ actions transparent and accessible to each other and to the general public.

The Few Available Program Evaluations Deemed U.S. Actions Effective

Despite an extensive search, we found few evaluations of the effectiveness of U.S. actions to meet its commitments under the five agreements. To identify such studies, we conducted a search of online information retrieval systems and contacted selected secretariats. We did not independently verify the methods used in these studies. The few studies we identified generally concluded that the actions examined had had positive effects.

We found two evaluations for CITES, four for the Framework Convention, three for the Montreal Protocol, and none for the other two agreements. Specifically:

- The two CITES studies, both by academicians, concluded that the United States has generally fulfilled its obligations by establishing a sophisticated program for implementing CITES. Nevertheless, according to one study, the United States has not been able to prevent all illegal trade in endangered and at-risk species.⁹
- The four Framework Convention studies, performed primarily by EPA contractors, concluded that EPA's programs helped reduce greenhouse gas emissions by spurring the introduction of energy-efficient lighting technology and encouraging producers to include energy-efficiency features in computers and other office equipment.¹⁰
- The three Montreal Protocol studies presented varying results. Two studies—one issued in 1998 by EPA's Office of Inspector General and the other published in the same year by two academicians—found that production bans under U.S. law led to decreases in ozone-depleting chemicals.¹¹ The third study, issued in 2000 by the Ozone Secretariat of the United Nations Environment Program, noted the growth of illegal trade in ozone-depleting substances in the United States.¹² The report also noted that U.S. authorities responded to such trade by arresting and sentencing many individuals on counts of smuggling the substances.

⁹ Michael J. Glennon and Alison L. Stewart, "The United States: Taking Environmental Treaties Seriously," and Harold K. Jacobson and Edith Brown Weiss, "Assessing the Record and Designing Strategies to Engage Countries," in *Engaging Countries: Strengthening Compliance with International Environmental Accords*, edited by Edith Brown Weiss and Harold K. Jacobson (Cambridge, Mass.: The MIT Press, 1998).

¹⁰ Richard Duke and Daniel M. Kammen, "The Economics of Energy Market Transformation Programs," *The Energy Journal*, Vol. 20, No. 4 (1999); Marvin J. Horowitz, "Economic Indicators of Market Transformation: Energy Efficient Lighting and EPA's Green Lights," *The Energy Journal*, Vol. 22, No. 4 (2001); Gartner Consulting, *ENERGY STAR Consumer Campaign and Product Labeling, Marketing, and Communications: Effectiveness Evaluation* (Dec. 12, 2001); and Carrie A. Webber et al., *Savings Estimates for the ENERGY STAR Voluntary labeling Program—2001 Status Report*, Feb. 15, 2002.

¹¹ EPA, Office of Inspector General, *The Effectiveness and Efficiency of EPA's Air Program*, Feb. 27, 1998; and Jacobson and Weiss, *op. cit.*

¹² United Nations Environment Program, Ozone Secretariat, *Actions on Ozone*, June 2000.

Contacts and Acknowledgments

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Individuals making key contributions to this testimony included Chase M. Huntley, Karen Keegan, David Marwick, Carol Herrnsstadt Shulman, and Daniel J. Semick.